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# ANNUAL REPORT 1955



BOEING AIRPLANE COMPANY



An

**ON THE COVER** — Boeing's 40 years of progress are shown in the artist's rendering. Flying above the original Plant 1 and the first airplane, the B & W, are today's jets: the B-52, prototype tanker-transport, KC-135, B-47. Pen sketches of company aircraft throughout the report highlight various steps of advancement in the 40 years.



# nual Report

# 1955

**Report to Stockholders Year Ended December 31, 1955**

## Table of Contents

HIGHLIGHTS . . . . .	2	PRODUCTS — <i>Continued</i>	
A YEAR OF SIGNIFICANCE . . . . .	3	500th Gas Turbine . . . . .	13
FINANCIAL REVIEW . . . . .	4	Spares — Subcontracting . . . . .	13
Looking Ahead . . . . .	4	ORGANIZATION CHANGES . . . . .	14
Cash Dividends . . . . .	4	COMMERCIAL TRANSPORT . . . . .	15
Working Capital Grows . . . . .	5	EXPANDING FACILITIES . . . . .	18
Facilities Investment . . . . .	5	ENGINEERING'S CHALLENGE . . . . .	20
Federal Income Taxes . . . . .	6	OUR EMPLOYEES . . . . .	22
Renegotiation . . . . .	6	More Than 65,000 Jobs . . . . .	22
Net Worth Increases . . . . .	8	Retirement Plan Adopted . . . . .	22
Backlog Up . . . . .	8	AND THE FUTURE . . . . .	24
PRODUCTS . . . . .	9	BALANCE SHEET . . . . .	26
B-52 Production Up . . . . .	9	STATEMENT OF NET EARNINGS . . . . .	28
More than 1200 B-47s . . . . .	9	EARNINGS RETAINED . . . . .	28
KC-97 Phasing Out . . . . .	10	NOTES TO FINANCIAL STATEMENTS . . . . .	29
KC-135 Phasing In . . . . .	10	ACCOUNTANTS' REPORT . . . . .	29
Missile Program Progresses . . . . .	10	FIVE-YEAR COMPARATIVE DATA . . . . .	30
		DIRECTORS AND OFFICERS . . . . .	32

*Contents of this report comply with national security requirements concerning publication of military information.*

**BOEING AIRPLANE COMPANY**

# Highlights

## Operating Summary

	1955	1954
Sales .....	\$853,827,722	\$1,022,676,265
Earnings before taxes on income .....	\$62,641,411	\$66,226,023
Taxes on income .....	\$32,250,000	\$34,250,000
Net earnings .....	\$30,391,411	\$31,976,023
Dividends paid .....	\$10,579,340	\$9,729,122
Net earnings per share .....	\$9.33	\$9.85
Dividends paid per share .....	\$3.25	\$3.00
Percentage of earnings before taxes on income to sales .....	7.34%	6.48%
Percentage of taxes on income to sales .....	3.78%	3.35%
Percentage of net earnings to sales .....	3.56%	3.13%

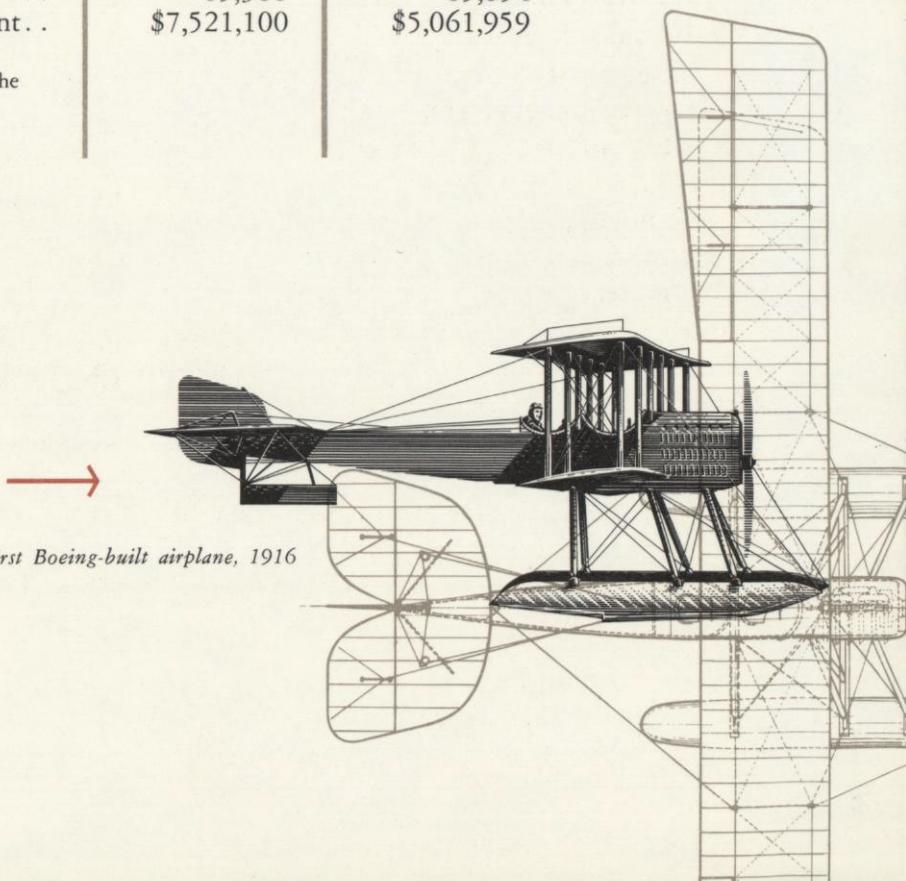
## Position at Year End

Working capital .....	\$96,768,220	\$78,526,760
Ratio of current assets to current liabilities .....	1.72 to 1	1.52 to 1
Stockholders' investment .....	\$121,475,358	\$100,694,555
Number of shares outstanding .....	3,258,125 3/4	3,246,436 3/4
Stockholders' equity per share .....	\$37.28	\$31.02
Backlog .....	\$2,624,000,000	\$2,131,000,000

## General Information

Total wages and salaries .....	\$319,791,241	\$300,244,415
Average number of employees .....	65,366	65,054
Gross additions to plant and equipment .....	\$7,521,100	\$5,061,959

NOTE: 1954 figures are restated to give effect to the recognition in 1955 of the 1952 renegotiation refund and projected refunds for the years 1953 and 1954.



B & W first Boeing-built airplane, 1916

# A Year of Significance

To the Stockholder:

As the Boeing Airplane Company nears its 40th anniversary, 1955 stands out as one of the most significant years in the company's history. From the viewpoint of sales and productive activity it was a good year. More importantly, it was a year of transition and a year of major decisions — decisions which will have an important bearing on the next decade of operations.

During 1955 the KC-135 Stratotanker was selected as the standard Air Force jet tanker, and substantial orders for this aircraft were received. The B-52 Stratofortress went into operational service with the Strategic Air Command. It is proving the high faith placed in it by both the Air Force and the company. The Wichita plant, swinging into second-source production, rolled out its first B-52 late in the year. Successful firings of Bomarc missiles, and technical progress on this important project, moved it closer to the production stage.

The 1952 report stated that in venturing to build the 707 prototype the company intended to demonstrate the advantages of jet transport to the military and to commercial air lines. To date seven leading American and foreign commercial airlines have purchased 84 Boeing jet transports. Additional sales are anticipated.

On July 22, 1956, the company will observe the 40th anniversary of its founding. It was only 13 years after the Wright brothers first flew at Kitty Hawk that William E. Boeing started the Boeing company. Thus the history of the company is practically synonymous with that of aviation itself.

While there is satisfaction in past accomplishments, an anniversary is more significant as a milestone from which to survey the future. The aircraft industry — all aviation — is in a period

of rapid technical progress. At no time in the past 40 years has your company been called upon to meet such major challenges in so short a period of time.

The company must maintain its leadership in the industry. It must remain competitive. It must provide the nation with vital new elements of defense. At the same time current military and commercial production must be continued on an efficient basis. To accomplish these ends it is necessary to increase research and development effort. New facilities in the form of laboratories, production space, offices and equipment must be provided. Present plans call for investing considerably more money in capital assets during the next two years than the cost of all company-owned capital assets now in use.

The magnitude of the financial requirements facing the company points emphatically to the necessity of fair and reasonable earnings. It is primarily through reinvestment of earnings that Boeing — and the entire aircraft industry — can provide the research and increased production capabilities that will keep America strong. Over a period of years the company has consistently plowed back into the business about two-thirds of its total earnings.

In addition, there must be reward for those who invest in the business. This is the American method — risk and reward. Net earnings of the aircraft industry as compared to sales, however, have been consistently lower than those of other types of manufacture. As will be seen by the requirements set forth in the Finance, Facilities and Engineering sections of this report, the limitations imposed on earnings in the aircraft industry present serious problems involving not only the company and its owners but national security as well.

# Financial Review

As anticipated in last year's Annual Report, 1955 sales of \$853,827,722 were down from the 1954 all-time high of \$1,022,676,265 (after adjustment in 1955 for provision for a possible renegotiation refund). Net earnings for 1955 after taxes on income were \$30,391,411 as compared to net earnings of \$31,976,023 for 1954 after adjustment for renegotiation. Sales and net earnings as stated in the 1954 report were \$1,033,176,265 and \$36,976,023 respectively.

Net earnings for the past year amounted to 3.56 cents per dollar of sales compared to 3.13 after renegotiation adjustment for the previous year. This was equivalent to \$9.33 per share, as compared to \$9.85 per share in 1954.

Production activities at the company's plants were at high level throughout the year. However, reduced deliveries of C-97 and B-47 airplanes and the transition of the B-52 program from a cost-plus-a-fixed-fee basis to a fixed-price basis account for the lower sales and earnings in 1955. Delivery of B-52s contracted for on a fixed-price basis, under which sales are not recorded until deliveries of completed units have been made, commenced in July. Therefore, although considerable effort was expended throughout the year on the B-52 fixed-price program, it contributed to sales and earnings only during the latter part of the year. Further, the KC-135 program, although building up, did not contribute to sales or earnings in 1955 as this program is being initiated on a fixed-price basis.

As in past years, a substantial portion of 1955 sales was under fixed-price contracts containing incentive provisions. Under these contracts, target costs and profits are established either at the inception of the contract or at spec-

ified times during the initial stages of the program. Upon completion of work, actual costs are compared with the previously established contract target costs and the incentive formula applied. If the planes have been produced at a cost lower than the target, company earnings are increased by a specified portion of the cost reductions—usually 20 per cent under current contracts. At the same time, the sales price to the government is reduced by 80 per cent of the cost reduction. If the actual cost exceeds the target cost, a corresponding percentage of the cost in excess of the target is borne by Boeing and the remainder by the government. Through aggressive adherence to a philosophy of cost consciousness, reductions below contractual targets continued to be achieved. The company has shared in these reductions under the incentive provisions of the contracts.

## Looking Ahead

With increased B-52 deliveries and increased activity on the Bomarc program scheduled for 1956, sales should be somewhat higher than in 1955. The KC-97 and B-47 production programs will be phased out in the latter part of the year. Production activity during 1956 on the KC-135 and 707 jet transport programs will be at an increasingly higher level. However, the first commercial jet transport is not scheduled for delivery until the latter part of 1958.

## Cash Dividends

Cash dividends of \$10,579,340 amounting to \$3.25 per share were paid in 1955.

For the first quarter of 1956, the Board de-

clared the established 50-cent quarterly dividend and a special dividend of 25 cents.

The requirements for substantial amounts of additional capital have dictated the company's conservative dividend policy. As previously stated, nearly two-thirds of earnings have been used to finance the rapid growth of the company's production and research activities. The magnitude of capital requirements is discussed in the Facilities section of this report. The present position of the company, and the prospects for the future, attest the soundness of the company's policy of reinvesting a substantial portion of earnings in the business.

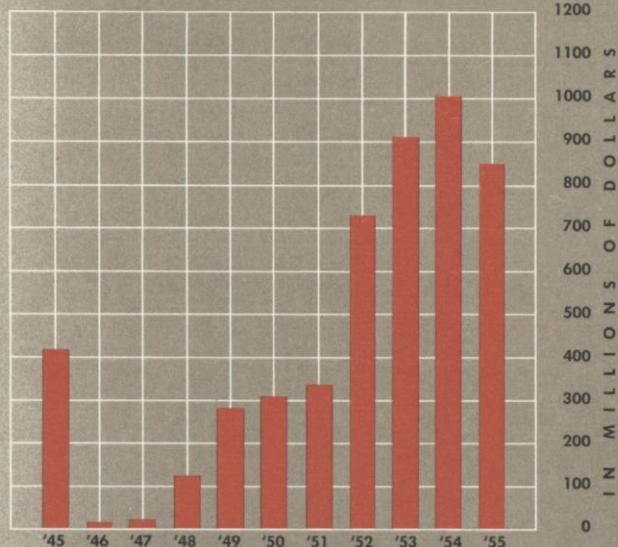
### Working Capital Grows

Working capital at the year end amounted to \$96,768,220, an increase of \$18,241,460 during the year. Although bank borrowings were not required during the year, it is anticipated that they will be necessary by mid-1956 and will extend over a period of years. Borrowings are necessary to finance the increased investment in government work-in-process inventories occasioned by the reduction of progress payments on fixed-price contracts and to finance the substantial facilities expansion program that will be carried out in 1956 and subsequent years. Borrowing also will be necessary to finance the portion of commercial transport work-in-process inventories not covered by advance payments from airline customers.

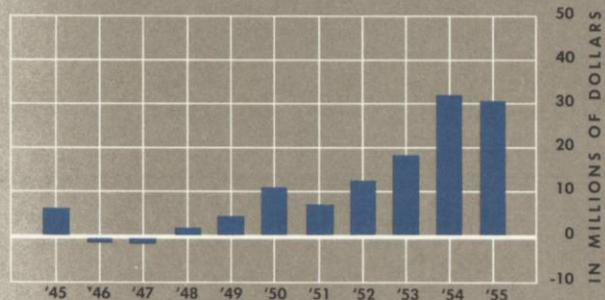
### Facilities Investment

Expenditures for property, plant, and equipment during 1955 amounted to \$7,521,100 and the company's gross investment at the year end totaled \$53,490,011. Since the beginning of the current facilities expansion program in 1950, expenditures have amounted to \$35,422,385. Included in the gross investment are facilities with an original cost of \$14,574,221 which were fully depreciated or amortized at the year end.

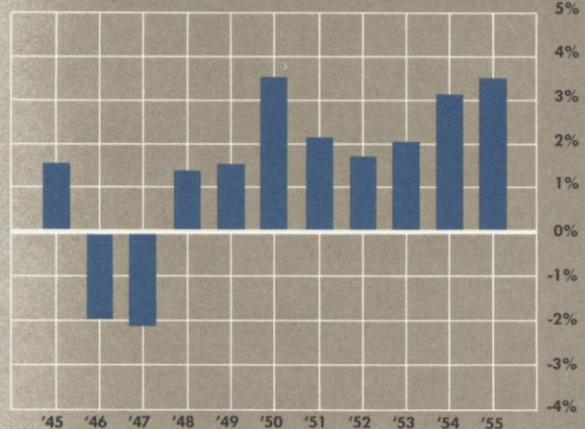
**Sales**  
1945-1955



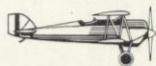
**Net Earnings**  
1945-1955



**Per Cent of Net Earnings to Sales**  
1945-1955



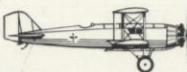
Certificates of necessity have been obtained over the past six years on facilities costing \$21,119,704. The certified portions of the cost of these facilities in the amount of \$14,957,243 are being amortized over 60-month periods. Depreciation and amortization of \$1,940,577 in excess of normal depreciation has been charged to operations in 1955. A portion of the amortization in excess of normal depreciation applicable to certain capital asset items is eligible for inclusion as a contract cost.



PW-9, 1923-28



P-12, 1929-32



40 Transport, 1925-31

### Federal Income Taxes

Examination of federal income tax returns for all years through 1949 has been completed and agreements reached, except that certain claims for refund of prior years taxes have not been settled. Such claims have not been recognized in the accounts. Tax returns for 1950, 1951, 1952 and 1953 are currently under examination by the Internal Revenue Service. It is believed

that the income tax liability stated in the Balance Sheet is adequate for all open years.

### Renegotiation

The company has appealed to the Tax Court of the United States from the determination of The Renegotiation Board that excessive profits were realized for the year 1952. It is the opinion of your management that the Board's determination is not consistent with the intent and objectives of the Renegotiation Act of 1951 and is not supported by the facts and reasons disclosed in its statement. The Renegotiation Board's determination came after the Los Angeles Regional Renegotiation Board had comprehensively reviewed Boeing's renegotiation case and had concluded that excessive profits had not been realized during 1952.

The Board determined that excessive profits in the amount of \$9,822,340 (\$10,000,000 less applicable state income taxes) had been realized during the year 1952. The net refund after taxes amounted to \$2,946,702. Your company's earnings during 1952 were well within the profit framework that was established at the time its contracts were negotiated with government procurement authorities. The percentages of renegotiable profits to sales before and after taxes of 7.60% and 2.28% respectively were substantially below the percentages on sales that were realized in 1952 by manufacturing industry generally. After renegotiation, the net return on sales was 1.89 per cent, or about one-third of that realized by all manufacturing industry.

It is your company's opinion that the return on net worth criterion was the controlling factor in The Renegotiation Board's determination. This criterion, as used in the renegotiation process, is merely a statistical computation of the return (earnings) realized on beginning book net worth and does not measure the reasonableness of the cost of articles furnished the government. Fur-

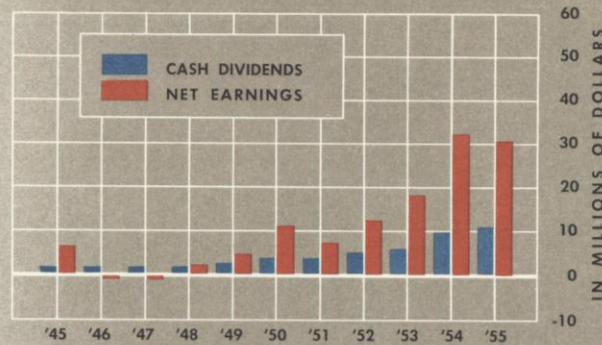
ther, it in no way gives consideration to the efficiency of contractors, or to the contribution to the defense of the nation that these contractors are making. Finally, it is not a reliable index of the reasonableness of a contractor's sales prices or profits.

Your management believes that the company's earnings in 1952 were reasonable under any and all concepts of renegotiation. When a company has made a substantial contribution to the defense effort by designing and producing superior products on schedule at minimum costs, and its earnings are within the contractually established profit framework, a determination of excessive profits is patently unjustified. In addition the determination is completely inconsistent with the efforts of the company and the procurement agencies of the government to preserve and foster incentives in the performance of contracts.

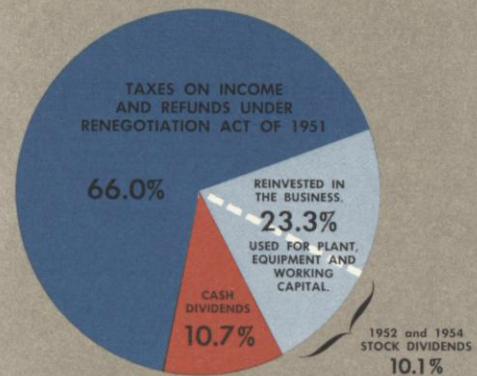
A projection of The Renegotiation Board's finding for the year 1952, as the company interprets it, would result in total refunds, after taxes, in the area of \$7,000,000 for 1953 and 1954 combined, with no refund for the year 1955.

Your management reaffirms the position taken in the 1952, 1953, and 1954 Annual Reports that earnings in each of these years were not excessive. However, in view of The Renegotiation Board's determination, recognition is being given in the financial statements to the 1952 net refund and projected refunds for the years 1953 and 1954 which total \$9,946,702. Since other contract adjustments have not materialized that were contemplated at the time the "allowance for contract adjustments including renegotiation" was established, this allowance in the amount of \$1,200,000 has been considered as fully available for renegotiation. Net earnings for the applicable years are, therefore, being restated through an adjustment in 1955 to earnings retained for use in the business in the amount of \$8,746,702. The re-statement of 1952, 1953, and 1954 net earnings, together with the revision

### Cash Dividends and Net Earnings 1945-1955

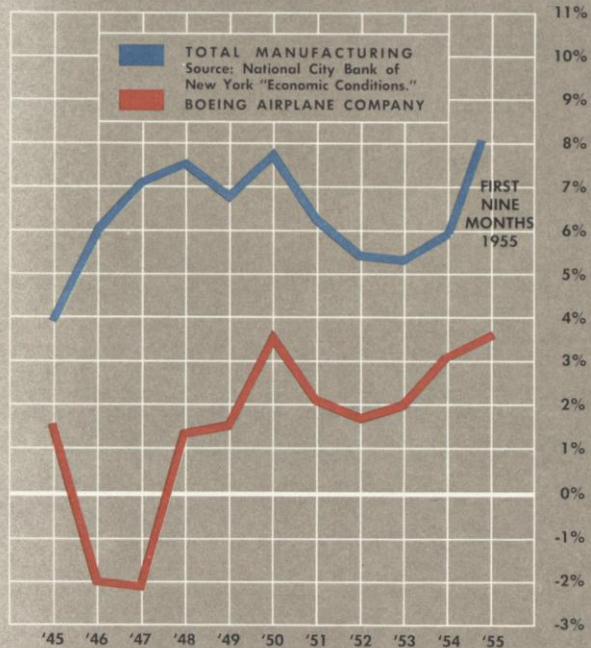


### Disposition of Earnings\* 1934-1955



\*TOTALING \$459,050,000 BEFORE TAXES AND ACTUAL AND PROJECTED REFUNDS UNDER THE RENEGOTIATION ACT OF 1951.  
(Since inception of present corporation in 1934.)

### Per Cent of Net Earnings to Sales 1945-1955



of the balance sheet amounts at the applicable year ends, is included in the five-year condensed comparative financial data set forth on Pages 30 and 31 of this report.

#### Net Worth Increases

The net worth of the company increased during 1955 by the earnings retained for use in the business (net earnings less cash dividends) in the amount of \$19,812,071 and by the \$968,732 received through the issuance of 11,689 shares of common stock at market price to company employees in connection with the incentive compensation plan. As explained previously, the recording in 1955 of the net renegotiation refunds for the year 1952 and the estimated refunds that may be required for the years 1953 and 1954 decreased net worth by \$8,746,702. Net worth at the year end after the above transactions totals

\$121,475,358 and stockholders' equity per share amounts to \$37.28 as compared to \$31.02 at the beginning of the year.

#### Backlog Up

The backlog of unfilled orders totaled approximately \$2,624,000,000 at year end, of which \$351,000,000 represented orders for commercial aircraft. At the close of business the previous year the backlog was \$2,131,000,000 with substantially all of the orders being under contracts with the government.

Included in the present backlog, but only to the extent allocated, are the starting or implementing funds on letter contracts with the government for which definitive contracts have not yet been signed. As of December 31, fixed-price contracts containing incentive provisions accounted for approximately 90 per cent of the government orders.



Production model B-52 Stratofortress flies near Mt. Rainier on initial flight. These global jet bombers, in production at the Seattle and Wichita plants, were put in operational service by the Air Force in 1955.



# Products



80 Transport, 1928-30



200 Monomail, 1930

## B-52 Production Up

Excellent progress was made on the B-52 program. First delivery of operational aircraft was made to the Strategic Air Command in the early summer. All deliveries to date have been made from the Seattle Division. Wichita, second production source, rolled out its first B-52 in December. Performance is demonstrating that second-source production within the company, as contrasted with second-source production by another company, will result in cost, quality and delivery benefits to the Air Force.

Deliveries of B-52s produced by the Seattle Division are made from the new company-operated Moses Lake Flight Center in central Washington. This government-owned facility, which opened in February of 1955, handles final equipment installations and acceptance check-out flights. First planes delivered from Moses Lake went into service with the 93rd Heavy Bombardment Wing at Castle Air Force Base. In service the B-52 Stratofortresses have maintained an extremely high degree of combat suitability.

Orders for increased B-52 production were received for both the Seattle and Wichita plants during the year.

## More Than 1200 B-47s

Largest production item in the company's peacetime history has been the B-47 Stratojet, more than 1200 of the six-jet medium bombers having come off the Wichita assembly lines since the first rollout in March, 1950. Peak sales were

recorded in 1954, the output having been reduced in 1955.

The B-47 is an excellent example of the project life-cycle of present-day aircraft and of the company effort that must be expended before earnings are realized. The project started in 1943. Believing the jet experience gained would be beneficial and hoping a production order might develop, the company took a calculated risk in 1945 and accepted a firm fixed-price contract to build two experimental models. The first of the two planes flew in December, 1947, and a production contract was received the following fall. No significant profits were realized until 1950, seven and one-half years after the inception of the project. Peak earnings came four years later.

While the production of B-47s soon will be phased out, the plane will be the standard medium bomber of the Strategic Air Command for several years. The Stratojet has earned a fine record of operational use and safety in the Air Force. During the 1955 SAC Bombing and Navigation Competition, the Stratojet won first place and three of the four other awards.

The Wichita Division had maintained on-schedule delivery of B-47s for 49 consecutive months at year end. While the performance of the plane has continually been improved and its gross weight increased from 125,000 to 200,000 pounds, cost to the Air Force has been continually reduced. B-47s coming off the production line today require approximately 6 per cent of the man-hours required to build the first production model.

Several modernization programs on B-47s were conducted by the company during the year,

both at Wichita and at Air Force bases. Early-model planes were inspected, repaired as necessary and brought up to date. Prospects are good that this type work will continue for the next several years.

### KC-97 Phasing Out

The final KC-97 will leave the Renton plant in the fall, bringing to a close a program which, like the B-47, had its inception in World War II. More than 800 of the double-decked type aircraft, which are used as tankers and transports by the military and as luxury carriers by the airlines, have been built. The Stratocruisers, sister ships of the KC-97s, are in commercial operation on both transocean and transcontinental routes.

Research on the Stratofreighter project began in 1942, and the first production contract was received in 1948. Like the B-47 program, this project did not develop any substantial profit until 1950, nine years after its inception. It too hit its peak profit year in 1954.

The reliability of the KC-97 and efficiency of Air Force crews have made refueling in the air a routine part of the global operations of the Strategic Air Command. Day and night, in good weather and in bad, KC-97s are refueling SAC bombers and fighters — extending their range to the physical limitations of the crews.

### KC-135 Phasing In

First of the new KC-135 jet tankers for the Air Force is scheduled to emerge from the Renton plant in the summer of 1956, less than two years after the initial production order was received. The combined efforts of the company's engineering and production teams and of vendors and subcontractors toward meeting this tight schedule have been most gratifying.

The last of the KC-97 tankers will be coming off the line shortly after the first jet tanker

makes its appearance. The company would now be facing a crucial gap in production cycling had it not invested more than \$16,000,000 to design and build the jet prototype. Ten years ago Boeing first started research on a jet tanker-transport. At that time money was not available either in government or company funds to finance development and construction. It was not until 1952 that the company was in a position to take the financial risk involved in producing a prototype model.

This plane, America's first jet transport, was first flown in July, 1954. Four weeks later the Air Force placed an order with the company for a limited quantity of jet tankers. The initial contract was followed in March, 1955, by an announcement that the Air Force would standardize on the Boeing KC-135 tanker and would place substantial additional orders with the company.

The 707 prototype jet transport was a major factor in securing these orders. It demonstrated to the Air Force the versatility and practicability of jet transport and proved the feasibility of high-speed high-altitude refueling. The existence of the prototype will result in the Air Force having a proved tanker far earlier and at less cost than otherwise would have been possible.

### Missile Program Progresses

Substantial progress was made in the guided missile program during the past year. Test firings of the supersonic ground-to-air interceptor missile have been successful. The Air Force has told the company to prepare for production.

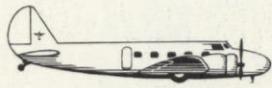
Considerable company effort was devoted to seeking adequate facilities for the Pilotless Air-

→  
A B-47 Stratojet demonstrates its maneuverability as it undergoes a flight test. The Wichita plant, which has produced more than 1200 of these medium jet bombers, can be seen in upper right-hand part of the photograph.

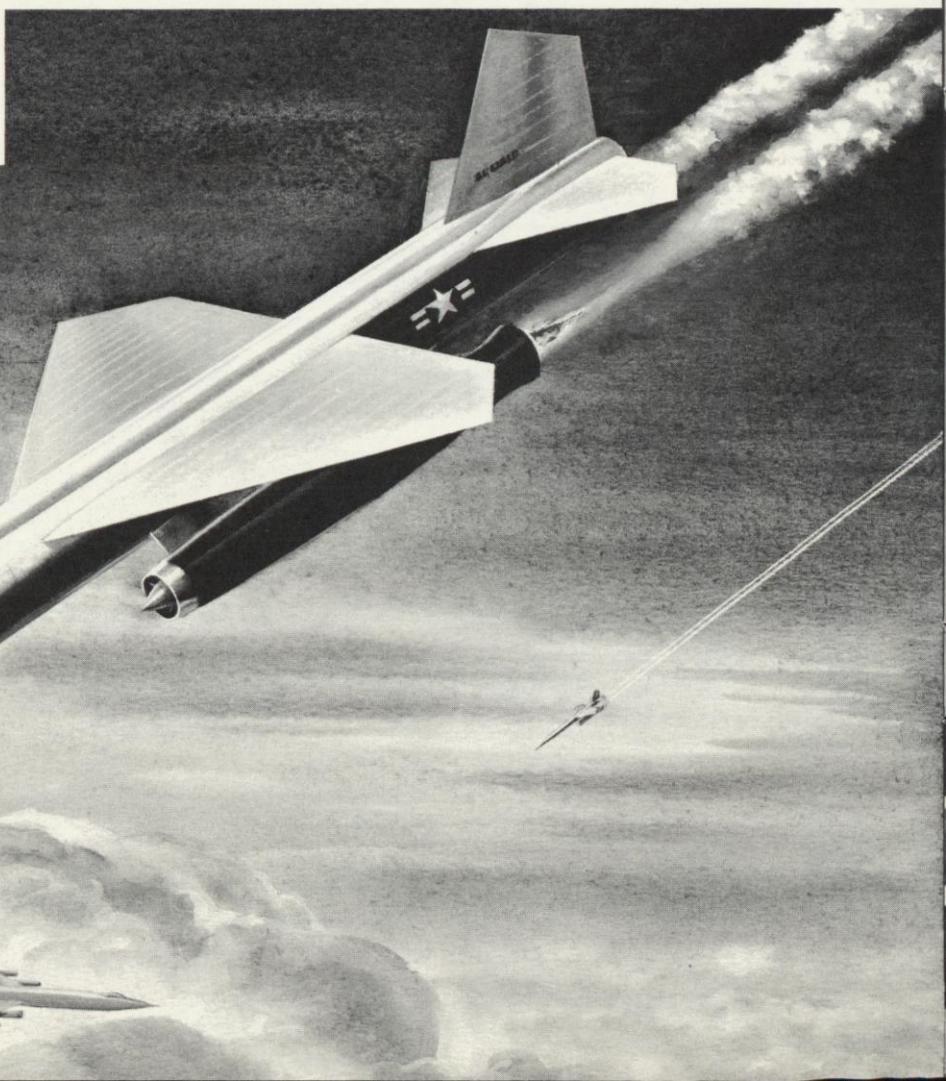




B-17 Flying Fortress, 1935-45



247 Transport, 1932-34





**KC-97s** currently are the Air Force's first-line tankers. Production of this plane is being phased out at the Renton plant as the KC-135 jet tanker line is built up.

craft Division. A number of alternate plans were explored and land options were taken at Denver and Salt Lake City. However, the government subsequently decided that the division's headquarters, research and developmental activities, and a "pilot" production line should be maintained in Seattle. It is proposed that the principal production be carried on at Wichita. At year end the total number of employees engaged in pilotless aircraft work was 5200.

### 500th Gas Turbine

The Industrial Products Division centered its activities on the 502 small gas turbine during the year. The 500th turbine built by the division was produced in December. More powerful and more economical turbines are now undergoing development tests.

The operation showed a profit for the year, and the company is continuing the project.

### Spares - Subcontracting

Spare parts shipments totaled approximately \$234,000,000 in 1955, marking the largest dollar volume of spares in company history. This activity directly reflects the increased number of Boeing airplanes in service.

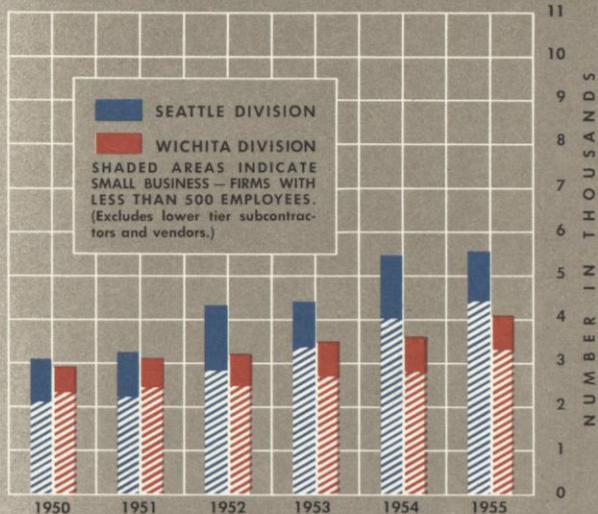
In keeping with the Air Force policy of broadening the production base, Boeing has brought into its Seattle area programs 5535 subcontractors and suppliers and 4055 in its Wichita programs. Of these firms, 81 per cent are classified as small business — firms employing 500 or less.

Artist's concept of Bomarc missile shows the ground-to-air interceptor homing in on its "target." The company has been notified to prepare for production of missile.



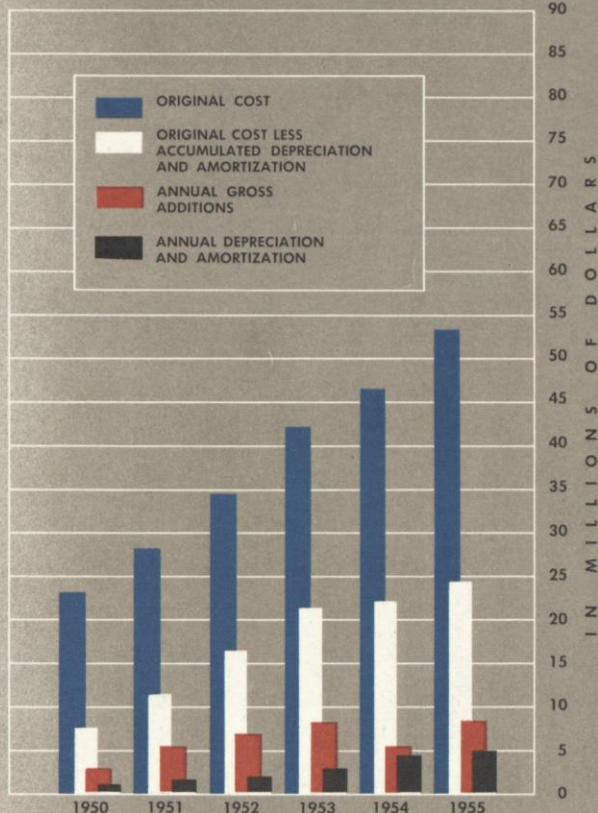
### Subcontractors and Vendors

1950-1955



### Company Investment in Property, Plant and Equipment

1950-1955



# Organization Changes

Company growth and increased complexity in products necessitated major organization changes early in 1956. Two new operating divisions and an over-all corporate headquarters organization were created. Formation of the new divisions was accomplished by dividing the Seattle aircraft manufacturing operations into a new Transport Division and a new Seattle Division.

The Wichita Division, Pilotless Aircraft Division and the Industrial Products Division continue their previously assigned responsibilities. The new Transport Division is responsible for the KC-135 and KC-97 tanker-transports and the 707 commercial jet transports. The new Seattle Division is responsible for the B-52 and major developmental projects.

**B-52 bombers on the line at Seattle. Production planes are taken to Moses Lake Flight Center on their first flight, where they are prepared for delivery to SAC.**

With the organization changes, two new vice-presidents were elected. Lysle A. Wood was named vice-president and general manager of the Pilotless Aircraft Division and J. B. Connelly was named vice-president and general manager of the new Transport Division.

J. E. Schaefer continues to serve as vice-president and general manager of the Wichita Division. Vice-President C. B. Gracey, who has been in charge of manufacturing at Wichita, was made general manager of the Seattle Division. Frank Terdina continues as manager of Industrial Products.

The objective of the new organizational arrangement is to permit a greater concentration of effort on each company project.



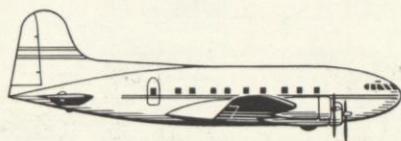


Prototype transport has been undergoing intensive flight test program. In 1955 plane also made 40 airline demonstration flights and set a transcontinental speed record.

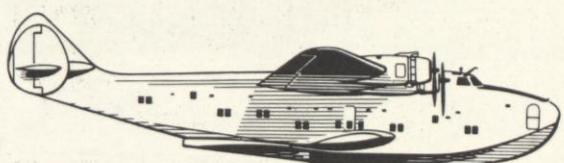
## Commercial Transport

One of the most significant developments during the past year was the establishment of a commercial program. The company has been a pioneer in the design and manufacture of air transports; however, in recent years it has centered its activities in the military field. During this period the company has made a careful study of commercial aviation, to keep abreast of the needs and to determine the most opportune time to establish a continuing commercial program.

It has long been an objective of the company to have commercial as well as military production on a continuing basis. Such a program



307 Stratoliner, 1938-40



314 Clipper, 1938-42

should provide a better balanced operation and greater stability.

As a result of the high interest and enthusiasm engendered among airline operators by the 707 prototype, the company believed it logical to undertake commercial production of this type aircraft. In July, 1955, the Air Force, after considering the benefits which would accrue to the government from commercial production of the 707, agreed that the company might use government facilities on a rental basis, for construction of jet airliners. The KC-135 jet tanker program will benefit in reduced costs through concurrent production.

Boeing has developed a family of jet airplanes to offer its customers: The 707 Stratoliner, powered with J57 engines, has a range permitting non-stop transcontinental operation. A variation of this model is powered by an advanced turbojet engine which is larger and has greater thrust. The 707 Intercontinental, larger in wing and fuselage than the other basic models, has a combination of range and load-carrying capacity greater than any other long-range transport now being offered. The Intercontinental will be powered by the larger engine and will have a gross weight of more than 280,000 pounds.

Orders have been received for all three of these models. First deliveries of the 707 Stratoliner will start in 1958, with Pan American World Airways, American Airlines, Trans-World Airlines, and Continental Air Lines planning to have



Boeing 707 jet transports have been ordered by the seven leading world airlines whose insignia are shown above. First deliveries of these airplanes, which will cruise at more than 550 mph, are scheduled for 1958.



the planes in operation in 1959. Braniff International Airways will be the first to put the more powerful Stratoliner in operation. Deliveries of Intercontinentals will commence in 1959 to Pan American, Air France and Sabena Belgian World Airlines.

During the past year the prototype flashed into national prominence when it set new trans-continental speed records. It flew from Seattle to Washington, D. C., in 3 hours and 58 minutes, and made the return trip in 4 hours and 8 minutes, for a total elapsed flying time of 8 hours and 6 minutes. This is less time than it takes the average conventional airliner to make the one-way flight.

Airline representatives from all over the

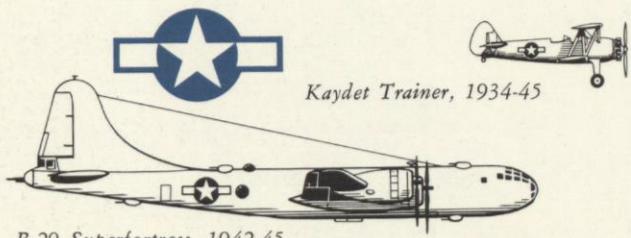
world have traveled to Seattle to inspect and fly in America's only jet transport. By the end of the year more than 40 airline demonstration flights had been conducted with more than 100 airline representatives taken aloft. Thirty-eight pilot evaluations were completed. Pilots who have been at the controls are unanimous in their praise for the plane, its flight characteristics and its safety features.

More important to both the company and its customers than the demonstration flights, is the opportunity the prototype provides to carry on an intensive flight-test program. The various systems, controls and components of the prototype are tried and tested, which will result in "proved" production airplanes.



# Expanding Facilities

A review of capital expenditures, past and prospective, indicates the magnitude of the challenge that lies ahead of the company. In 1955 capital expenditures totaled \$7,521,100 at Seattle and Wichita. During the previous five years \$27,901,285 was invested in capital assets, bringing the total since 1949 to more than \$35,000,000. This total is overshadowed, however, by present requirements. Expenditures and commitments for capital assets of more than \$60,000,000 are planned during 1956 and 1957.



B-29 Superfortress, 1942-45

Kaydet Trainer, 1934-45

During the past year the company purchased a 65-acre tract south of the main plant in Seattle. Work is now under way on a \$21,000,000 Developmental Center on this property. This building program, which will add 1,021,000 square feet of covered areas to company facilities, is scheduled for completion in the fall of 1957. Certain phases of guided missile work, physical research, structural testing and experimental activities are among the functions which will occupy the area.

At the same time work is also proceeding on an \$8,500,000 manufacturing and office facility for the Transport Division at Renton. Combining manufacturing and assembly floor space, engi-

During the next two years expenditures and commitments for capital assets will total more than \$60,000,000. The facilities expansion program includes a \$21,000,000 Developmental Center, shown in the drawing at the right.

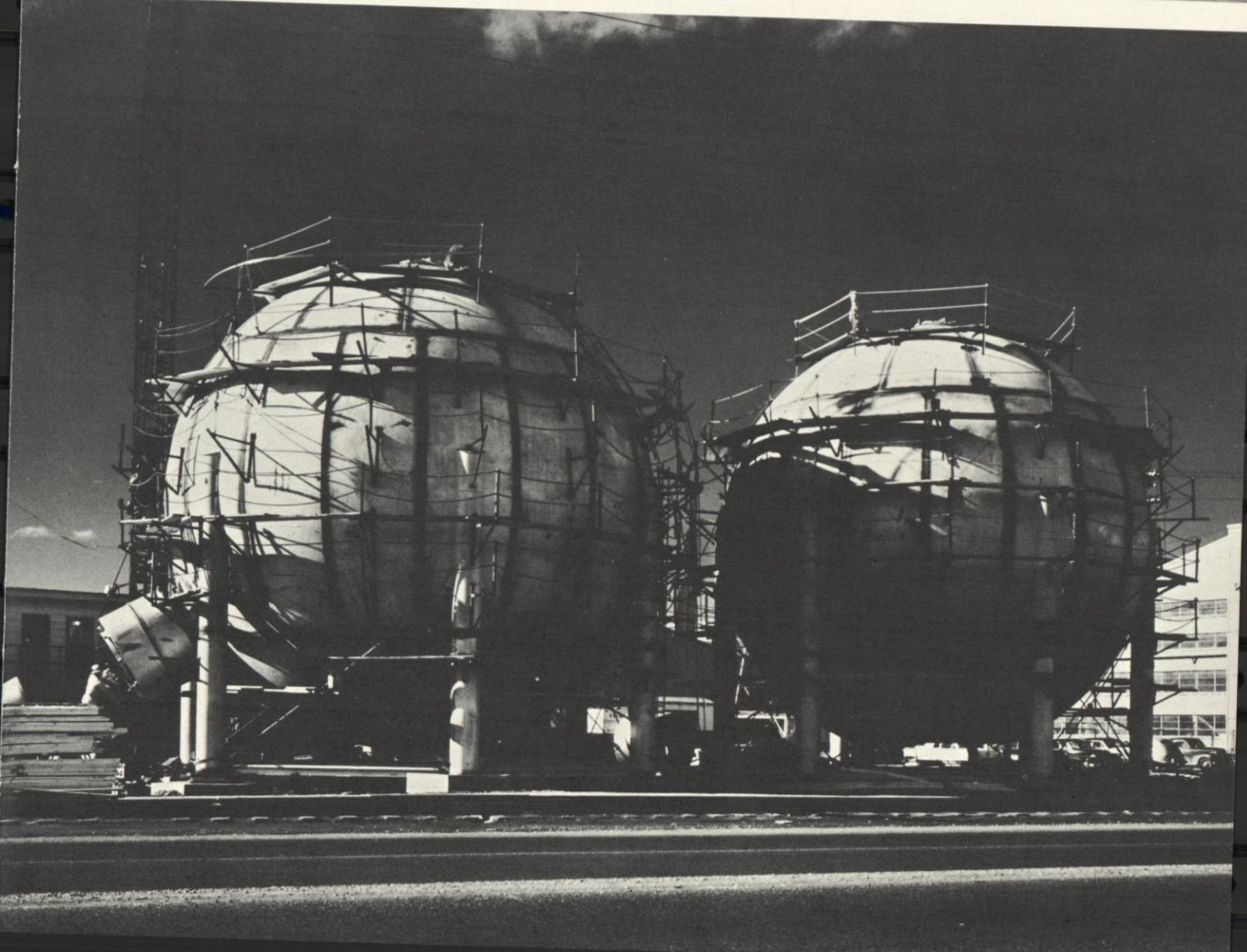
neering space and Transport Division offices, the facility will help integrate this growing company effort. The major portion of the facility, which will have an area of 558,000 square feet, will be used for assembling body sections of 707 commercial jet transports. It is to be completed in early summer 1957.

Construction of the new supersonic wind tunnel, at a cost of \$2,175,000, started in 1955 and will be completed later this year. This tunnel will be a major factor in developing the next generation of supersonic military aircraft.

A facility is now under construction at Plant 1 in Seattle for pressure testing of full body sections of the KC-135.

Substantial sums also have been expended for new machine tools to increase the company's productive capacity. It has been necessary to make equally large investments in development and test equipment, such as a new 5000 KVA radiant heat facility and a high-pressure altitude test chamber. New manufacturing process equipment, like that needed for metal bonding, also has required sizable investments.

Huge air-storage tanks for new supersonic wind tunnel take shape. Tunnel, being built at a cost of \$2,175,000 at Seattle's Plant 2, will be completed this year. It is needed to develop next generation of military aircraft.



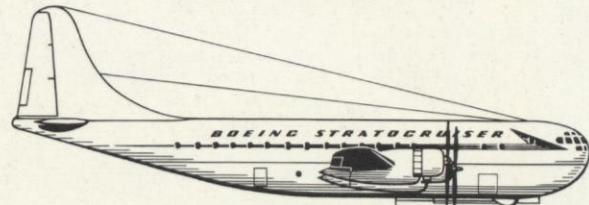
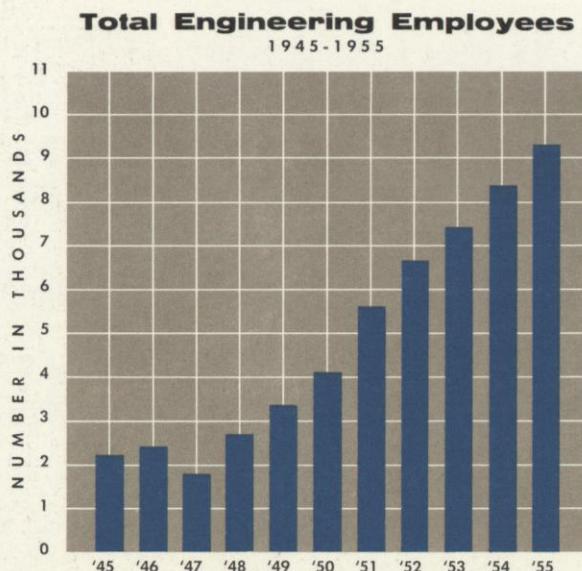
# Engineering's Challenge

As the company approaches its 40th anniversary no other field of activity offers a better observation point than does engineering for a look at the future. In the laboratories and on the drawing boards engineers already are working on aircraft that will be coming off the production lines 10 years hence when the company celebrates its 50th anniversary.

To assure aggressive progress in military aviation the Department of Defense is calling upon these men to shorten the time period of the development cycle and to make rapid advances in aircraft and missile performance and operational reliability. While the engineers must speed their

work, the problems they face are greater than ever before. The next generation of military aircraft will be flying at supersonic speeds requiring solution of friction-heat problems. New-type structures, controls, communications and navigation systems, must be developed.

New equipment and structures are necessary to enable our engineers to carry out the research and development required in this era of rapid technological advances. The company is endeavoring to meet these needs as quickly and efficiently as possible. To meet the growing work load, engineering manpower was increased 11 per cent during 1955.



377 Stratocruiser, 1947-50



Symbolic of the many facets of research and development being carried on today is this research engineer's task of finding the best location for low-frequency antenna on jet aircraft. He uses a metal-tipped plastic probe to measure the charge on model in electrostatic cage. Airplane model is placed at angle in a 20,000-volt field.



# Our Employees

The people who make up the Boeing team constitute the company's major asset. Their "know-how" accumulated in the 40 years of the company's life, their constant seeking of better ways to do the job, their pride in product quality and reliability, are a bulwark of strength.

Working in this dynamic industry, the company's employees realize there is no room for complacency. During the last year employees voluntarily took more than 352,600 man-hours of off-hour training in programs provided by the company in cooperation with local vocational schools in the Seattle and Wichita areas.

The company spent more than \$3,100,000 in providing 1,356,428 man-hours of on-the-job training for employees during 1955. The program is being continued. An active program is also being carried out to provide additional training for members of management, with the company's supervisory personnel having taken more than 158,000 man-hours of training during 1955.

## More Than 65,000 Jobs

Employment for the year averaged 65,366; 38,454 were employed in the Seattle-Renton and Moses Lake areas, and 26,912 at Wichita.

Total wages and salaries for the year were \$319,791,241, up \$19,546,826 over the previous year. Under the Incentive Compensation Plan, \$3,250,000 was awarded to 5282 officers, supervisors and other eligible employees in cash and stock of the company. This award is in recognition of their efforts to increase company performance and to reduce costs.

Production and maintenance employees received wage rate increases ranging from 4½ to

7½ cents an hour during the year. General salaried employees received a 3 per cent wage increase. Good relationships continued with individual employees and with the bargaining groups.

## Retirement Plan Adopted

An important step in retaining and building a strong work force was taken in 1955 with the adoption of a retirement plan following stockholders' approval given at the last annual meeting. The plan, which has an effective date of January 1, 1955, provides benefits based on continuous service and annual basic income. It also provides benefits for service prior to the effective date. A variable annuity benefit for future service is based on that portion of the individual's base annual pay above \$4200. The plan is non-contributory and all employees are covered except a few belonging to a bargaining group that has not agreed to it. The plan has been approved by the Treasury Department and by the Defense Department procuring agency so that costs incurred thereunder will be tax deductible and includable as a cost of performing contracts.

Money necessary to finance the plan will be paid into a trust fund under a trust agreement with the First National City Bank of New York, the trustee; and The Pacific National Bank of Seattle and The Fourth National Bank in Wichita, co-trustees. These banks will hold and invest the money. Benefits will be paid from the trust fund.

**Skills required for single program are symbolized by 101 employees needed to test prototype. Included are pilots, inspectors, mechanics, radio operators, data specialists, flight-test and liaison engineers, secretaries, guard.**





# and the Future

During recent years America has become increasingly aware of the importance of air power. With the Russians as well as the free world having nuclear bombs, military superiority lies not so much in the bomb itself as in the ability to deliver the bomb. Because of this, America's continued possession of a strong Air Force is generally considered to be the determining factor in maintaining world peace.

Today the Strategic Air Command has a striking force of superior quality. It is planned and built around the Boeing B-47s and B-52s, these planes being supplemented by the KC-97. Soon this retaliatory force will be further strengthened by the addition of KC-135s. The company is conscious of the great responsibility it has been given in building this force.

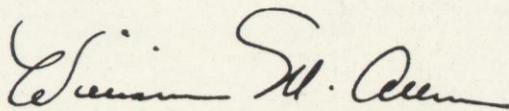
Defense, however, can never remain static. Just as the B-47 and the B-52 outmoded the piston-engined bombers of World War II, so must new weapons be developed now to maintain continued security. During this period of rapid scientific development it is mandatory that our country maintain a commanding lead in technical advancement.

The government has requested industry to accept a larger share of the research and development burden and to finance more of the required facilities. As was explained in the Facilities and Engineering sections of this report, the company is preparing to make the largest capital expenditures in its history toward this end. The security of the nation demands that we do so.

During its 40-year history the Boeing company has gained world recognition for its leadership in the advancement of aviation. It welcomes the challenge presented by the new era of supersonic flight. Boeing people have the know-how and resourcefulness to lead the way in meeting the challenge.

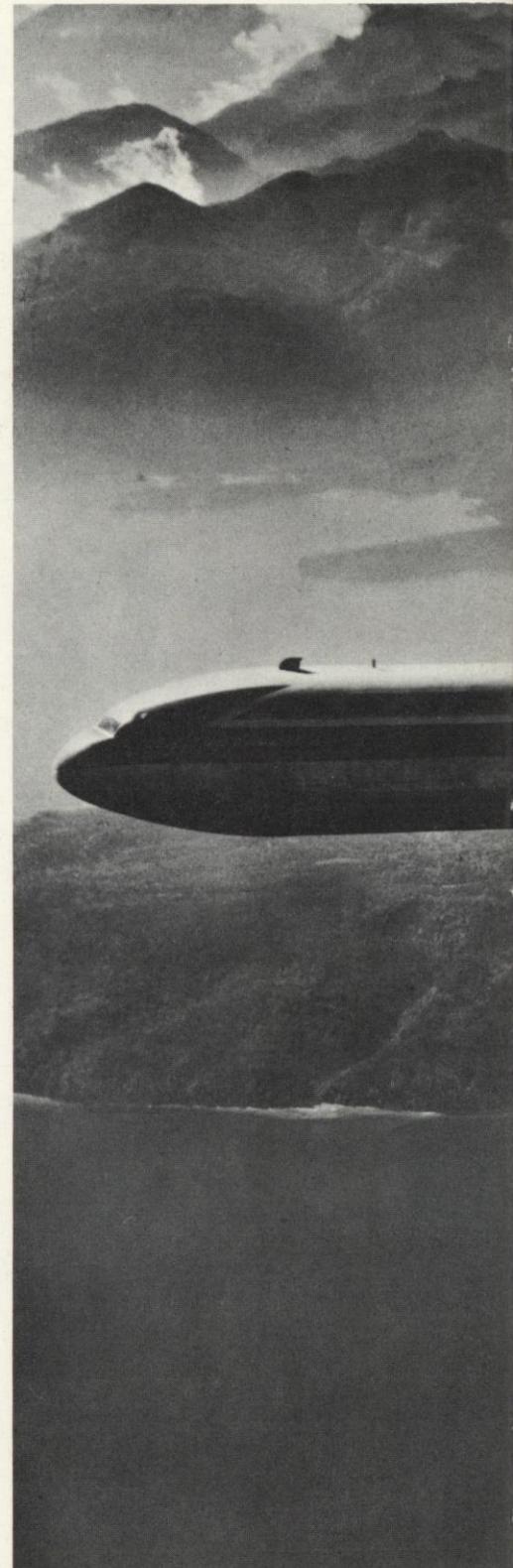
However, we cannot fulfill our responsibilities if earnings that would be used for research, development and new facilities are to be held to amounts substantially below manufacturing industry generally and then further reduced through renegotiation.

For the Board of Directors



PRESIDENT

March 5, 1956





Jet prototype and B-52 Stratofortress conduct refueling test near Olympic Mountains.

# Balance Sheet

BOEING AIRPLANE COMPANY

## ASSETS

### CURRENT ASSETS:

Cash .....	\$ 19,144,741
United States Treasury Bills and Notes.....	7,505,823
Accounts receivable —	
United States .....	\$ 17,904,522
Others .....	3,318,218
Estimate amounts receivable from the United States —	21,222,740
For expenditures under cost-plus-a-fixed-fee and facilities contracts and applicable fees.....	\$ 33,615,916
For deliveries under contracts for which unit prices have not been established or revised.....	20,980,802
Accumulated charges on fixed price type contracts less estimated cost (average total contract basis) of deliveries.....	54,596,718
Less progress and advance payments.....	\$523,468,687
Inventories of parts and materials at the lower of average cost or market .....	403,649,202
Prepaid expenses .....	119,819,485
TOTAL CURRENT ASSETS.....	7,806,893
	1,281,952
	\$231,378,352

### PROPERTY, PLANT, AND EQUIPMENT, at cost:

Land (\$2,462,759) and buildings.....	\$ 31,980,572
Machinery, tools, and equipment.....	21,509,439
	\$ 53,490,011
Less allowance for accumulated depreciation and amortization..	28,782,873
	24,707,138
	\$256,085,490

**DECEMBER 31, 1955**

**LIABILITIES AND STOCKHOLDERS' INVESTMENT**

**CURRENT LIABILITIES:**

Accounts payable .....	\$ 62,242,312
Salaries and wages.....	25,366,817
Taxes other than taxes on income.....	2,951,881
Estimated amounts payable to the United States arising from contract price revisions.....	8,645,007
Incentive compensation for officers and employees.....	3,250,000
Payable to the Trustee under retirement plan.....	6,338,005
Allowance for renegotiation, net of taxes.....	8,178,681
Federal and state taxes on income.....	\$29,740,124
Less U. S. Certificates of Indebtedness — Tax Series.....	<u>12,102,695</u>
<b>TOTAL CURRENT LIABILITIES.....</b>	<b>\$134,610,132</b>

**STOCKHOLDERS' INVESTMENT:**

Capital stock, par value \$5 a share —	
Authorized — 5,000,000 shares	
Issued and outstanding — 3,258,125 $\frac{3}{4}$ shares at stated value ..	\$60,968,732
Earnings retained for use in the business (after transfer to capital stock of \$46,445,666 in 1952 and 1954) .....	<u>60,506,626</u>
	121,475,358

\$256,085,490

See notes to financial statements.

## Statement of Net Earnings

BOEING AIRPLANE COMPANY

Year Ended December 31, 1955

Sales .....	\$853,827,722
Other income .....	776,542
	<u>\$854,604,264</u>
Cost of sales (excluding applicable portion of certain items set forth below in the amounts incurred during the year) .....	\$764,603,371
General and administrative expenses.....	9,408,434
Research and developmental expenses.....	8,411,913
Depreciation and amortization.....	4,925,358
Incentive compensation for officers and employees.....	3,250,000
Other expenses .....	1,363,777
Federal and state taxes on income.....	32,250,000
NET EARNINGS FOR THE YEAR.....	<u>824,212,853</u> <u>\$ 30,391,411</u>

See notes to financial statements.

## Earnings Retained for Use in the Business

BOEING AIRPLANE COMPANY

Year Ended December 31, 1955

Balance at January 1, 1955, as previously reported.....	\$49,441,257
Deduct provision for renegotiation refunds for prior years (net of taxes):	
1952 .....	\$2,946,702
1953 .....	2,000,000
1954 .....	<u>5,000,000</u>
	\$9,946,702
Less amount previously provided.....	<u>1,200,000</u> 8,746,702
Balance at January 1, 1955, as adjusted.....	\$40,694,555
Net earnings for the year.....	<u>30,391,411</u>
	\$71,085,966
Cash dividends — \$3.25 per share.....	10,579,340
Balance at December 31, 1955.....	<u>\$60,506,626</u>

See notes to financial statements.

## Notes to Financial Statements

**RENEGOTIATION AND RESTATEMENT OF PRIOR YEARS' EARNINGS:** In 1955 The Renegotiation Board in Washington, D. C., issued to the company a unilateral order that excessive profits of \$9,822,340 were realized for the year 1952, even though the Los Angeles Regional Renegotiation Board had previously determined that there were no excessive profits. The cost to the company is \$2,946,702 after taxes. Taking into consideration the allowance of \$1,200,000 previously provided, the charge to earnings for that year is \$1,746,702.

In view of the Board's order, provision has been made in the accounts for the 1952 refund and the estimated amounts that may be required to be refunded for the years 1953 and 1954 based upon the company's interpretation of the controlling criterion used by the Board for the year 1952. Use of the same criterion indicates that no refund will be required for the year 1955 and no provision therefor has been made in the accounts.

The net earnings statements for the years 1952, 1953, and 1954 have been restated and the balance sheet accounts have been retroactively adjusted for renegotiation in the company's five-year condensed comparative financial statements.

It is the company's belief that no excessive profits were

realized in any of the aforementioned years. An appeal from the Board's decision for the year 1952 has been taken to the Tax Court of the United States.

**RETIREMENT PLAN:** Effective as of January 1, 1955 the company adopted a non-contributory retirement plan covering all employees who have met the eligibility requirements except for a few in one bargaining unit who have not agreed to the plan. A charge of \$8,339,005 has been made in the accounts for 1955, of which \$6,703,518 represents current service and \$1,635,487 is applicable to past service. The past service liability not recognized in the accounts at December 31, 1955 is estimated at \$15,200,000.

**STOCK ISSUED UNDER THE INCENTIVE COMPENSATION PLAN:** During the year 11,689 shares of the company's authorized but unissued stock were sold for an aggregate amount of \$968,732 to officers and employees under the provisions of the Incentive Compensation Plan. These shares were a portion of the 200,000 shares reserved for this purpose by the Certificate of Incorporation of the company as amended. At December 31, 1955, 188,311 shares remain that may be sold free from the preemptive rights of shareholders.

## Accountants' Report

TOUCHE, NIVEN, BAILEY & SMART

CERTIFIED PUBLIC ACCOUNTANTS

1411 FOURTH AVENUE  
SEATTLE 1, WASH.

March 5, 1956

Board of Directors,  
Boeing Airplane Company,  
Seattle, Washington.

We have examined the balance sheet of Boeing Airplane Company as of December 31, 1955, and the related statements of net earnings and earnings retained for use in the business for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We were unable to obtain satisfactory confirmations of receivables from the United States by direct communication, but we satisfied ourselves as to such accounts by other auditing procedures.

In our opinion, the accompanying balance sheet and statements of net earnings and earnings retained for use in the business present fairly the financial position of Boeing Airplane Company at December 31, 1955, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Also, in our opinion, the action of the Board of Directors on December 12, 1955, in setting aside the sum of \$3,250,000 for the year 1955 under the Incentive Compensation Plan for Officers and Employees, is in conformity with the provisions contained in the first paragraph of Section 2 of such plan.

*Touche, Niven, Bailey & Smart*

Certified Public Accountants

# Five-Year Condensed Co

## **Financial Position**      **As of December 31,**      **1955**

Current assets.....	\$ 231,378,352
Current liabilities.....	134,610,132
Working capital.....	<u>\$ 96,768,220</u>
Property, plant, and equipment, net.....	24,707,138
Net assets.....	<u><u>\$ 121,475,358</u></u>
Represented by stockholders' investment in:	
Capital stock.....	\$ 60,968,732
Additional paid-in capital.....	.....
Earnings retained for use in the business.....	60,506,626
Stockholders' equity per share.....	<u>\$ 121,475,358</u>
Ratio of current assets to current liabilities.....	\$ 37.28
	1.72 to 1

## **Sales, Earnings and Dividends**

Sales.....	\$ 853,827,722
Earnings before taxes on income.....	62,641,411
Taxes on income.....	32,250,000
Net earnings.....	30,391,411
Cash dividends paid.....	10,579,340
Net earnings per share.....	9.33
Cash dividends paid per share.....	3.25
Income taxes per share.....	9.90
% earnings before taxes on income to sales.....	7.34%
% taxes on income to sales.....	3.78%
% net earnings to sales.....	3.56%

## **General Information**

Backlog .....	\$2,624,000,000
Number of authorized shares of common stock.....	5,000,000
Number of shares outstanding.....	3,258,125 $\frac{3}{4}$
Average number of employees.....	65,366
Total wages and salaries.....	<u>\$ 319,791,241</u>
Gross additions to plant and equipment.....	7,521,100
Depreciation and amortization.....	4,925,358
Amortization in excess of normal depreciation.....	1,940,577
Square feet of floor area:	
Government owned.....	8,593,841
Boeing owned.....	3,769,664
Leased .....	1,516,666

NOTE: Financial data for 1952, 1953, and 1954 are restated to give effect to the recognition in 1955 of the 1952 renegotiation refund and projected refunds for the years 1953 and 1954.

## Comparative Financial Data

1954	1953	1952	1951
\$ 230,475,654	\$ 210,137,249	\$ 164,486,771	\$ 150,103,117
151,948,894	153,243,190	115,181,015	103,834,776
\$ 78,526,760	\$ 56,894,059	\$ 49,305,756	\$ 46,268,341
22,167,795	21,553,595	16,500,488	11,525,716
<u>\$ 100,694,555</u>	<u>\$ 78,447,654</u>	<u>\$ 65,806,244</u>	<u>\$ 57,794,057</u>
 \$ 60,000,000	 \$ 35,203,414	 \$ 35,203,414	 \$ 5,412,270
40,694,555	43,244,240	30,602,830	8,142,064
<u>\$ 100,694,555</u>	<u>\$ 78,447,654</u>	<u>\$ 65,806,244</u>	<u>44,239,723</u>
\$ 31.02	\$ 24.16	\$ 20.26	\$ 57,794,057
1.52 to 1	1.37 to 1	1.43 to 1	\$ 17.80
			1.45 to 1
 \$1,022,676,265	 \$ 913,045,946	 \$ 731,687,874	 \$ 337,300,566
66,226,023	53,618,178	42,462,109	19,840,751
34,250,000	35,300,000	30,124,362	12,700,000
31,976,023	18,318,178	12,337,747	7,140,751
9,729,122	5,676,768	4,325,560	3,247,074
9.85	5.64	3.80	2.20
3.00	1.75	1.33 1/3	1.00
10.55	10.87	9.28	3.91
6.48%	5.87%	5.80%	5.88%
3.35%	3.86%	4.11%	3.76%
3.13%	2.01%	1.69%	2.12%
 \$2,131,000,000	 \$2,357,000,000	 \$1,648,000,000	 \$1,355,000,000
5,000,000	2,500,000	2,500,000	1,250,000
3,246,436 3/4	1,623,681	1,623,681	1,082,454
65,054	58,716	54,677	47,699
\$ 300,244,415	\$ 261,682,685	\$ 238,174,873	\$ 218,220,129
5,061,959	8,009,875	6,745,430	5,175,449
4,030,572	2,795,931	1,642,244	1,197,863
1,728,987	1,025,848	281,192	153,636
7,879,008	6,806,552	6,080,412	5,541,855
3,370,705	3,301,850	2,779,333	2,577,508
1,630,908	1,471,705	1,324,696	814,307

## Board of Directors

### and Officers



WILLIAM M. ALLEN  
President, Director



C. B. GRACEY  
Vice-President — General  
Manager, Seattle Div.



J. E. SCHAEFER  
Vice-President — General  
Manager, Wichita Div.,  
Director



C. L. EGTVEDT  
Chairman, Director



FRED P. LAUDAN  
Vice-President —  
Manufacturing,  
Director



DIETRICH SCHMITZ  
Director  
President, Washington  
Mutual Savings Bank,  
Seattle



WELLWOOD E. BEALL  
Senior Vice-President,  
Director



A. F. LOGAN  
Vice-President —  
Industrial Relations



CLYDE SKEEN  
Controller



J. B. CONNELLY  
Vice-President — General  
Manager, Transport Div.



J. P. MURRAY  
Vice-President —  
Eastern Representative



EDWARD C. WELLS  
Vice-President —  
Engineering, Director



DARRAH CORBET  
Director  
President, Smith Cannery  
Machines Company,  
Seattle



EVAN M. NELSEN  
Treasurer



J. P. WEYERHAEUSER, JR.  
Director  
President, Weyerhaeuser  
Timber Company, Tacoma



D. A. FORWARD  
Director  
Senior Vice-President  
The First National City  
Bank of New York



J. E. PRINCE  
Vice-President —  
Administration, Secretary



LYSLE A. WOOD  
Vice-President — General  
Manager, Pilotless  
Aircraft Div.



ARTEMUS L. GATES  
Director  
Consultant,  
New York City



WILLIAM G. REED  
Director  
Chairman, Simpson  
Logging Company,  
Seattle



J. O. YEASTING  
Vice-President — Finance,  
Director

**General Counsel**

HOLMAN, MICHELWAIT, MARION, BLACK & PERKINS

**General Auditors**

TOUCHE, NIVEN, BAILEY & SMART

**Transfer Agent**

CITY BANK FARMERS TRUST COMPANY, NEW YORK CITY

**Registrar**

THE FIRST NATIONAL CITY BANK OF NEW YORK, NEW YORK CITY

**BOEING AIRPLANE COMPANY**

GENERAL OFFICES

• 7755 EAST MARGINAL WAY

• SEATTLE, WASHINGTON

*Forty Years of Leadership, 1916-1956*

